



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,115	01/02/2002	Frank Kowalewski	10191/2008	9341
7590 Kenyon & Kenyon One Broadway New York, NY 10004			EXAMINER PHAN, TRI H	
			ART UNIT 2616	PAPER NUMBER

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,115

Applicant(s)

KOWALEWSKI, FRANK

Examiner

Tri H. Phan

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 12-16, 18 and 20-22 is/are rejected.
- 7) ☐ Claim(s) 17 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1-3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendments

1. This Office Action is in response to the Preliminary Amendment filed on January 2nd, 2002. Claims 1-11 are now canceled and new claims 12-22 are added. Claims 12-22 are now pending in the application.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

3. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 12-15 and 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by **Moulsley, Timothy J.** (U.S.6,407,993; hereinafter refer as '**Moulsley**').

- In regard to claims 12 and 23, **Moulsley** discloses, *the data transmission method and device for use with multiple data transmission technologies and/or multiple data transmission parameters of one or more data transmission technologies* (for example see figure 1; col. 1, lines 4-26; where TDMA, CDMA and OFDM technologies use in the UMTS telecommunication system), *comprising*

a transmitting device and a receiving device configured to communicate with one another over at least one data transmission channel ('transmitting and receiving means'; for example see figure 1; col. 2; lines 1-6);

a determination device ('means for determining the quality of the signal'; for example see col. 1, lines 60-63; col. 2; lines 6-8) *configured to determine transmission properties of the at least one data transmission channel, the properties being at least one of properties of multiple data transmission technologies* (for example see col. 1, lines 33-48; col. 4, line 64 through col. 5, line 8; wherein the timing accuracy and variable rate are properties of TDMA and CDMA technologies), *and multiple data transmission parameters of at least one data transmission technology* (for example see col. 2, lines 8-16; wherein the characteristics of the uplink/downlink transmission such as bit rate, bit error rate and end-to-end delay are the "*data transmission parameters*" determining the quality of the uplink/downlink transmission); *and*

a selector device ('modulating means selecting the characteristics'; col. 1, lines 63-65; col. 2; lines 8-12) *coupled to the determination device and to at least one of the transmitting*

Art Unit: 2616

device and the receiving device (where the controller 42 connects with the channel quality estimating 86, the transmitter 68, and the receiver 70 as disclosed in figures 7-8), *the selector device being configured to select a certain data transmission technology having certain data transmission parameters according to a result of the determination* (for example see col. 1, lines 63-65; col. 2, lines 8-16; wherein the selecting characteristics for the uplink/downlink transmission such as bit rate, bit error rate and end-to-end delay, e.g. “data transmission parameters”, are the concerning qualities for the uplink/downlink transmission in determination).

- Regarding claims 13-15 and 21-22, **Moulsley** further discloses, *wherein the selector device is coupled to the transmitting device* (for example see figure 7; where the controller 42 is connecting with the transmitter 68) *and to the receiving device* (for example see figure 8; where the controller 42 is connecting with the receiver 70); *wherein the data transmission device is a mobile wireless telephone and the data transmission channel is a wireless channel* (for example see figure 1).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 16, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Moulsley, Timothy J.** (U.S.6,407,993) in view of **Hämäläinen et al.** (U.S.6,289,217; hereinafter refer as '**Hämäläinen**').

- In regard to claims 16, 18 and 20, **Moulsley** discloses all the subject matter of the claimed invention about the cellular radio such as Universal Mobile Telephone System 'UMTS' in the telecommunication system as discussed above in part 5 of this Office action. **Moulsley** does disclose about the optimizing the transmission of the signal to the condition surrounding the environment by determining the quality of signal and selecting the characteristics of the uplink/downlink transmission, where the selecting characteristics for the uplink/downlink transmission are the concerning qualities for the uplink/downlink transmission in determination the timing accuracy and variable rate of TDMA and CDMA technologies ("*rate of change*"; for example see col. 2, line 63 through col. 3, line 6; col. 3, lines 47-65); but fails to explicitly disclose about the "*maximum delay*" of the data transmission channel. However, such implementation is known in the art.

For example, **Hämäläinen** discloses the adaptive radio connection over the connection in a cellular radio system by increasing/decreasing the coding rate ("*determine a rate of change of the data transmission channel*"; for example see col. 3, line 62 through col. 4, line 16) or adapting the link within the maximum delay when the quality of the source varies in time ("*determine a maximum delay of the data transmission channel*"; for example see col. 2, lines 28-39; col. 8, lines 56-63).

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to combine the invention as taught by **Hämäläinen**, by adapting the coding rate and time delay of the link quality into the **Moulsley**'s optimizing the quality of the transmission signal to the condition surrounding the environment, with the motivation being to optimize and improve the ability to adapt the varying interference and quality of the source signal (for example see **Hämäläinen**: col. 2, lines 42-46).

Allowable Subject Matter

8. Claims 17 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Klein et al. (U.S.6,212,243) and **Ue et al.** (U.S.6,577,617) are all cited to show devices and methods for improving the adjustment to the change in transmission properties of transmission channels in the telecommunication architectures, which are considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri H. Phan, whose telephone number is (571) 272-3074. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on (571) 272-3179.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tri H. Phan
June 12, 2006


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600
e/n/lo